

REMARKS

Amendments to the Claims

Claims 1-14 were previously cancelled. Claims 15-21 are pending. Claims 15, 16 and 18 are herein amended. Support for the amendments to claims 15, 16, and 18 can be found in the Specification at page 7, lines 1-3, page 8, line 12-18, and page 10, lines 4-14. No new matter has been added.

Claim Rejections Under 35 U.S.C. §102

The Examiner rejects claims 15-17 as anticipated by Simmons (EP 0463660). Applicants respectfully disagree.

Applicants respectfully submit that Simmons discloses that the antioxidant is an essential element for preventing or retarding oxidation (page 2, lines 54-55). The serious effects of the presence of the antioxidant on the contents, such as aldehydes, in the flavoring mixture are clearly shown in Tables 1-4 of Simmons. On the other hand, the present invention does not necessitate the antioxidant at all and even excludes it. For at least this reason, Applicants submit that Simmons does not anticipate the present invention.

It is also clear from the disclosure of Simmons that the "linolenic acid" in Table 2 of Simmons is α -linolenic acid, which is an n-3 long-chain unsaturated fatty acid, and is excluded by the claims. However, the Examiner states:

Linolenic acid is taken to be the n-6 fatty acid in this case (*see* applicants' specification at page 5, 2nd paragraph) (Office Action, page 6).

Applicants respectfully submit that by this statement the Examiner demonstrates that she has disregarded the significance of Applicants' statements explaining the difference between α -linolenic acid and γ -linolenic acid and has improperly used the disclosure of the present application to reject the claims.

Applicants submit that in the present instance the Examiner has made a conclusory assertion that "linolenic acid" specifically means γ -linolenic acid, rather than the commonly understood meaning of α -linolenic acid. Moreover, the Examiner has ignored Applicants'

statements indicating that the commonly understood meaning of the prior art would exclude the presently claimed invention.

Specifically, Applicants argued:

“linolenic acid,” when described as such, generally means the α -linolenic acid (an n-3 long-chain highly unsaturated fatty acid) rather than the γ -linolenic acid described in the Specification (Amendment, filed July 8, 2010, page 10).

As additional support, Applicants herein provide a list of common names of fats, which demonstrates that “linolenic acid” generally refers to only α -linolenic acid (AOCS printout, attached).

Furthermore, Applicants again emphasize that reliance on Applicants’ own Specification is improper. The Examiner is not permitted to take into account knowledge gleaned only from Applicants’ disclosure in rejecting the claims. MPEP § 2145.

For this additional reason, Applicants submit that the Examiner has failed to establish that Simmons anticipates the presently claimed methods.

Claim Rejections Under 35 U.S.C. § 103

The Examiner rejects claims 15-17 under 35 U.S.C. § 103 as being unpatentable over van Dorp.

The Examiner states that “Applicants [sic] arguments with regard to the discussion of a prior art reference have been considered but do not appear to be related to the claims in the application” (Office Action, page 4).

However, Applicants maintain that the Examiner’s assumption that the claimed methods comprising vegetable oils are “the same method steps” as the disclosure of van Dorp which add arachidonic acid to “a bland fat or oil as a diluent” because “only a very small proportion of the flavouring compound or precursor is usually required” (Office Action, page 4, and van Dorp, col. 3, lines 29-30) is incorrect.

First, Applicants submit that with regard to claims 15-17, van Dorp does not disclose: adding to a food a decomposed substance of a vegetable fat and oil composition, said composition consisting of

1) a vegetable fat and oil and

- 2) 1% by weight or more of an n-6 long-chain highly unsaturated fatty acid having 18 or more carbon atoms and 3 or more double bonds, or
- 3) an ester thereof,

wherein said decomposed substance is obtained by oxidation of said composition via heating.

Instead, van Dorp discloses mixing chicken fat and ethanol containing 10% by weight arachidonic acid, which was then simmered in 800 cc water for 7 minutes. Then, the entire mixture of chicken fat, ethanol, and arachidonic acid was added to the other ingredients or water (van Dorp, col. 7, lines 50-75). Thus, the fat and oil compositions does not “consist of a vegetable fat and oil and 1% by weight or more of an n-6 long-chain highly unsaturated fatty acid having 18 or more carbon atoms and 3 or more double bonds.” For at least this reason, Applicants submit that the Examiner has failed to establish a *prima facie* case of obviousness. Applicants request that the rejection be withdrawn.

Second, with regard to all of claims 15-21, Applicants maintain that the KOKUMI (body taste) of food is improved by the decomposed substance or its extract of n-6 long-chain unsaturated fatty acid and a vegetable fat and oil. Applicants maintain that unlike van Dorp, the fat and oil is not a “diluent” for the n-6 long chain fatty acid, but is an essential component for producing the above total flavor of KOKUMI. That is, the flavor is not generated by the n-6 long chain fatty acid alone, but by the combination of both the fatty acid and the vegetable oil and fat.

As discussed in the last response, the composition of a substance obtained from vegetable fat and oil is different from a substance obtained from chicken fat and oil (Amendment, July 8, 2010, page 10). Moreover, based on the composition, the flavors are different. Thus, one of skill in the art would not find the flavor obtained by the present methods to be obvious in view of van Dorp and in fact would find this flavor to be unexpected.

Furthermore, the Examiner’s statement that “The claims appear to differ from van Dorp in the recitation of the amount of flavoring agent used in the food” (Office Action, page 3). Applicants respectfully submit that this is not the only difference. Applicants maintain that, in addition, van Dorp does not use the same method steps as those in the instant claims.

The Examiner also rejects claims 17-21 as obvious in view of van Dorp and a new reference Kiritsakis.

The Examiner applies the Kiritsakis reference to support the idea that olive oil has multiple flavor components, including ketones and alcohols (specifically hexanal, heptane-2-one, and alcohol, *see* Office Action, page 5).

However, the Examiner makes broad statements as to why one of skill in the art would include ketones and alcohol with the arachidonic acid by stating that “if one of ordinary skill in the art wanted to optimize the flavor of the food, it would have been obvious to modify the flavor with the alcohol of the claims” (*see* Office Action, page 5).

The Examiner provides no explanation for the proposition that one of skill in the art would know how to “optimize the flavor” of the food by adding these aldehydes, alcohols or ketones (presumably present in the vegetable oil or fat) to arachidonic acid. There are infinite ways to optimize the flavor of food, and van Dorp says nothing about what “body taste” is or how to optimize for this flavor. Thus, van Dorp provides no guidance on how one of skill in the art would optimize the flavor of food by adding aldehydes, ketones, or alcohols; especially if one of skill in the art is given no guidance on whether to add the specific alcohol of claim 21.

Furthermore, as discussed above, the vegetable fat and oil is not “just a diluent” in the present invention. Thus, one of skill in the art would not have any reason to expect that adding the olive oil of Kiritsakis as a diluent for the flavoring of van Dorp would obtain any different flavor. In fact one of skill in the art would not have had any reason to mix arachidonic acid first with an olive oil diluent and then heat in water as a further diluent. (*see* van Dorp, col. 7, line 68-75).

In addition, Kiritsakis shows that a variety of ketones and alcohols are originally contained as flavor components in natural olive oil (Table 7). In contrast, the present invention is of a decomposed substance obtained by oxidation *via* heating of the claimed components. Thus, the Examiner has failed to establish that Kiritsakis in combination with van Dorp disclose each and every element of the claimed invention.

Applicants therefore submit that one of skill in the art would not find the present invention obvious in view of the cited prior art. Applicants request that the present rejection be withdrawn.


Applicants believe the pending application claims subject matter free of the prior art and that the application is in condition for allowance. The favorable actions of withdrawal of the pending rejections and allowance of the claims are requested.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Susan W. Gorman, Ph.D. Reg. No. 47,604 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

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Attachment: AOCs (Common Names for Fatty Acids)